

Practice

For use with pages 453–457

Find the square roots of the number.

1. 36

2. 361

3. 729

4. 1089

5. 4900

6. 10,000

Approximate the square root to the nearest integer.

7. $\sqrt{39}$

8. $-\sqrt{85}$

9. $\sqrt{105}$

10. $-\sqrt{136}$

11. $\sqrt{17.4}$

12. $-\sqrt{3.3}$

Use a calculator to approximate the square root. Round to the nearest tenth.

13. $\sqrt{5}$

14. $-\sqrt{12}$

15. $\sqrt{102}$

16. $-\sqrt{74}$

17. $\sqrt{1585}$

18. $\sqrt{27.8}$

Evaluate the expression when $a = 72$ and $b = 8$.

19. $\sqrt{a - b}$

20. $\sqrt{a + b + 1}$

21. $-4\sqrt{ab}$

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Solve the equation. Round to the nearest tenth if necessary.

22. $x^2 = 64$

23. $y^2 = 324$

24. $225 = n^2$

25. $t^2 = 42$

26. $150 = c^2$

27. $5y^2 = 48$

Solve the equation. Round to the nearest hundredth if necessary.

28. $2x^2 = 32$

29. $90 = 1.5t^2 + 8$

30. $5n^2 - 4 = 74$

31. A square ice skating rink has an area of 1849 square feet. What is the perimeter of the rink?

32. A forest ranger is stationed in a 58 foot tall fire tower. The equation for the distance in miles that the ranger can see is $d = \sqrt{1.5h}$, where h is the height in feet above the ground. Find the distance the ranger can see. Round your answer to the nearest tenth.